

LISTING OF THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

1. (currently amended) A communications network comprising:
 - two or more cell sites for communication with wireless terminals, at least one of the cell sites having multiple receive antennas; ~~and~~
 - a central site having one or more controllers;
 - a switch system through which the one or more controllers are connected to the two or more cell sites;
 - a cell selector that uses a ~~macro-diversity diversity~~-technique to counter macro spatial effects in the communications network, the cell selector selects ~~select~~ one of the cell sites from the two or more cell sites for reception from a particular wireless terminal and connects the selected cell site to a respective controller through the switch system; and
 - an antenna selector that uses a ~~micro-diversity diversity~~-technique to counter micro spatial effects in the communications network, the antenna selector selects ~~select~~ one of the receive antennas of the multiple receive antennas of the selected cell site.
2. (previously presented) A communications network according to claim 1, wherein:
 - the cell selector is in the central site.
3. (previously presented) A communications network according to claim 1, wherein:
 - the antenna selector is in the one or more controllers.
- 4 (previously presented) A communications network according to claim 1 wherein the one or more controllers include transceivers that transmit and receive RF signals according to respective protocols that are used by the wireless terminals.

5. (previously presented) A communications network according to claim 1 wherein the central site is connected to the two or more cell sites via optical fibers, and each cell site comprises an optical transmitter and an optical receiver.

6. (currently amended) A communications network according to claim 1 wherein:
relative to the two or more cell sites, the cell selector is arranged before the switch system and the antenna selector is arranged after the switch system, so that the cell selector selects the one of the cell sites before the antenna selector selects the one of the receive antennas.

7. (previously presented) A communications network according to claim 1 wherein:
relative to the two or more cell sites, the cell selector and the antenna selector are arranged before the switch system.

8. (previously presented) A communications network, comprising:
a plurality of cell sites which receive a signal from a wireless terminal, each cell site having multiple receive antennas; and
first means for using a diversity technique to select one of the cell sites;
second means for using a diversity technique to select one of the multiple receive antennas of the selected one of the cell sites; and
third means for providing communication between a controller and the selected one of the multiple receive antennas of the selected one of the cell sites.

9. (previously presented) A communications network according to claim 8, wherein:

the third means comprises a switch;

the first means is on one side of the switch; and

the second means is on an opposite side of the switch.

10. (previously presented) A communications network according to claim 8, wherein:

the third means comprises a switch; and

the first and second means are on one side of the switch.

11. (currently amended) A communications network according to claim 8, wherein:
the third means comprises a switch; and

relative to the plurality of cell sites, the first means is arranged before the switch and the second means is arranged after the switch, so that the first means select the one of the cell sites before the second means selects the one of the multiple receive antennas.

12. (previously presented) A communications network according to claim 8, wherein:

the third means comprises a switch; and

relative to the plurality of cell sites, the first and second means are both arranged before the switch.

13. (new) A communications network according to claim 1, wherein the multiple receive antennas of the at least one of the cell sites include first and second receive antennas of one of the cell sites, and the at least one of the cell sites includes a first electric-to-optical converter associated with the first receive antenna, and a second electric-to-optical converter associated with the second receive antenna, the communications network further comprising:

an optoelectronic port having at least first and second optical receivers;

a first optical fiber coupled between the first optical receiver and the first electric-to-optical converter to carry a receive signal of the first receive antenna; and

a second optical fiber coupled between the second optical receiver and the second electric-to-optical converter to carry a receive signal of the second receive antenna.

14. (new) A communications network according to claim 13, wherein

the antenna selector selects one of the receive antennas by selecting a signal from a set of signals which includes signals of the first and second optical receivers.

15. (new) A communications network according to claim 13, further comprising:

a transmit antenna at the at least one of the cell sites;

an optical-to-electric converter associated with the transmit antenna; and
an optical transmitter associated with the optoelectronic port;
wherein the optical transmitter is coupled to the optical-to-electric converter of the
transmit antenna to carry a transmit signal of the transmit antenna.

16. (new) A communications network according to claim 1, wherein:
signals of the multiple receive antennas are received at the antenna selector; and
the antenna selector selects the one receive antenna of the multiple receive antennas by
selecting one of the signals of the multiple receive antennas and passing the selected one of the
signals of the multiple receive antennas to the cell selector.

17. (new) A communications network, comprising:
at least first and second cell sites for communication with wireless terminals, the at least
first and second cell sites each have respective first and second receive antennas;
a central site having one or more controllers; and
a switch system through which the one or more controllers are connected to the at least
first and second cell sites, the switch system includes separate first and second receive switching
components; wherein:
the first receive switching component receives signals from the respective first receive
antennas of the at least first and second cell sites, selects one of the signals thereof as a first
signal and provides the first signal to the one or more controllers;
the second receive switching component receives signals from the respective second
receive antennas of the at least first and second cell sites, selects one of the signals thereof as a
second signal and provides the second signal to the one or more controllers; and
the one or more controllers selects one signal from a set of signals which includes the
first and second signals.

18. (new) A communications network according to claim 17, further comprising:
a first electric-to-optical converter associated with the first receive antenna of the first
cell site;

a second electric-to-optical converter associated with the second receive antenna of the first cell site;

an optoelectronic port having at least first and second optical receivers;

a first optical fiber coupled between the first optical receiver and the first electric-to-optical converter to carry a receive signal of the first receive antenna of the first cell site; and

a second optical fiber coupled between the second optical receiver and the second electric-to-optical converter to carry a receive signal of the second receive antenna of the first cell site.

19. (new) A communications network according to claim 18, wherein the first signal is from the first optical receiver, and the second signal is from the second optical receiver.

20. (new) A communications network according to claim 18, further comprising:
a transmit antenna at the first cell site;
an optical-to-electric converter associated with the transmit antenna; and
an optical transmitter associated with the optoelectronic port;
wherein the optical transmitter is coupled to the optical-to-electric converter of the transmit antenna to carry a transmit signal of the transmit antenna.

21. (new) A communications network, comprising:
at least first and second cell sites for communication with wireless terminals, the at least first and second cell sites each have respective first and second receive antennas and respective first and second electrical-to-optical converters;

a first optoelectronic port with a first optical-to-electrical receiver optically coupled to the first electrical-to-optical converter of the first cell site, and a second optical-to-electrical receiver optically coupled to the second electrical-to-optical converter of the first cell site;

a second optoelectronic port with a first optical-to-electrical receiver optically coupled to the first electrical-to-optical converter of the second cell site, and a second optical-to-electrical receiver optically coupled to the second electrical-to-optical converter of the second cell site; and

a controller coupled to receive a first RF signal from the first optical receiver of the first optoelectronic port, a second RF signal from the second optical receiver of the first optoelectronic port, a third RF signal from the first optical receiver of the second optoelectronic port, and a fourth RF signal from the second optical receiver of the second optoelectronic port;

wherein the controller select one signal from a set of signals which includes the first, second, third and fourth RF signals.